

What is claimed is:

1. A method of separating and collating mammogram records, said method including the steps of:

5       scanning at least one radiological film mammogram relating to a patient thereby to obtain at least one digitized image of the at least one film mammogram;

          storing the at least one digitized image in a memory;

10      providing and scanning a separator film having identifiable features which when scanned identify the film as a separator film, and including positioning the separator film immediately after the at least one radiological film of a patient; and

15      repeating said steps of scanning, storing, and providing for the remaining film mammograms of N patients in a film mammogram queue, where  $N \geq 1$ ;

          wherein the digitized images generated subsequent to each scanned separator film are stored separately from the stored digitized images obtained from prior scanned film mammograms.

20      2. A method according to claim 1 further including the step of printing a printout of the at least one digitized image of the at least one film mammogram of a patient, and including conveying and positioning the printout together with the at least one film mammogram, such that the at least one film mammogram and printout form a collated package of physical data relating to a single patient.

25      3. A method according to claim 2 wherein said step of printing provides a printout which contains location markers indicating anatomical abnormalities found on a mammogram.

4. A method according to claim 2 wherein said step of printing a printout is effected prior to said step of providing and scanning.

30      5. A method according to claim 2 wherein said step of printing a printout is effected after said scanning of a separator film in said step of providing and

scanning .

6. A method according to claim 2 wherein said step of repeating also includes repeating said step of printing.

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7. A method according to claim 2 further includes a step of inputting wherein patient identifier data are entered.

10 8. A method according to claim 7 wherein said step of inputting is effected prior to said step of providing and scanning.

9. A method according to claim 7 wherein said step of inputting is effected prior to said step of scanning.

15 10. A method according to claim 7 wherein said step of repeating also includes repeating said step of inputting.

20 11. A method according to claim 7 wherein said step of inputting includes entering identifier data for every patient having a set of mammograms in the mammogram queue prior to beginning said step of scanning and wherein said step of repeating includes repeating said steps of scanning, storing, providing, and printing.

12. A method for separating and collating mammogram records, said method including the steps of:

25 scanning a set of film mammograms relating to a patient thereby to obtain at least one digitized image of the set of film mammograms;

moving the scanned set of mammograms to a collating station;

providing and scanning a separator film, including positioning said separator film immediately after the set of film mammograms of a patient;

30 positioning the separator film so that it functions as the last film of the scanned set of film mammograms located at the collating station; and

repeating said scanning, moving, providing and positioning steps for all N sets of film mammograms in a film mammogram queue, where  $N \geq 1$ ; and

transferring each of the N sets of film mammograms positioned between separator films to its own individual storage container for storage.

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13. A method according to claim 12 further including:

a step of printing providing a printout of the at least one digitized image; and

10 a step of conveying wherein the printout is conveyed to and positioned with the set of film mammograms at the collating station,

whereby the set of film mammograms and printout form a collated package of physical data relating to a single patient.

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14. A method according to claim 13 wherein said step of printing provides a printout which contains location markers indicating anatomical abnormalities found on a mammogram.

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15. A method according to claim 13 wherein said steps of printing and conveying are effected prior to said step of providing.

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16. A method according to claim 13 wherein said steps of printing and conveying are effected prior to said step of positioning.

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17. A method according to claim 13 wherein said step of repeating also includes repeating said steps of printing and conveying.

18. A method according to claim 13 further including a step of inputting wherein patient identifier data are entered.

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19. A method according to claim 18 wherein said step of inputting is effected prior to said step of providing.

20.A method according to claim 18 wherein said step of inputting is effected prior to said step of scanning.

5       21.A method according to claim 18 wherein said step of repeating also includes repeating said step of inputting.

10      22.A method according to claim 18 wherein said step of inputting includes entering identifier data for every patient having a set of mammograms in the mammogram queue prior to beginning said step of scanning and wherein the repeating step includes repeating the steps of scanning, moving, providing, positioning, printing and conveying.

15      23.A workstation system for collating radiological film mammograms and other physical records, said system including:  
          a scanner operative to receive and digitize radiological film mammograms from a patient and a separator film carrying identifiable features for identifying the film as a separator film;  
          a collating station for receiving the scanned films from said scanner;  
          processing means for receiving digitized images from said scanner operative to evaluate the digitized images of the film mammograms so as to detect suspicious lesions therein, further operative to generate output data indicative thereof and to store the data in association with the digitized images;  
          wherein said processing means is further operative to detect said scanned separator film and to assign all subsequent scanned radiographic film mammograms to other patients;  
          a printer in communication with said processing means for producing a printout of the digitized images identifying data and output data relating to the patient, said printer including a conveyor for conveying the printout to said collating station; and  
          means for synchronizing said scanner and said printer such that the

printout is laid on the scanned films prior to the delivery to said collating station of the separator film.

24. A system according to claim 23 further including a display for displaying the  
5 digitized images of scanned radiological film mammograms received from said processing means which is in electronic communication with said display.

25. A system according to any one of claims 23-24 further including an input device for entering identifier data relating to the patient.

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26. A system according to claim 23 wherein the conveyor includes a set of rollers.

27. A system according to claim 23 wherein the conveyor is a paper guide.

15 28. A separator film for use with a mammogram workstation, the workstation including a scanner and a processing means, said film having at least one identifiable characteristic recognizable by the processing means so that the film is identified as a separator film, thereby indicating to the processing means that all subsequently scanned film mammograms relate to patients other than patients  
20 whose film mammograms were scanned prior to said separator film.

29. A separator film according to claim 28 wherein the at least one identifiable characteristic is chosen from among the following:

graphical indicia;

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a marker;

a textured edge; and

a serrated edge.

30 30. A separator film according to claim 28 for use with a workstation system as described in claim 23.